

CLAIMS AMENDMENT PAPER

In response to PTO Office Action dated 01/10/2005

Please cancel claims 2, 7, 13, 14, 16, and 25. In addition, please amend the claims as outlined in the following current listing of claims, including the addition of new claims 30 and 31.

Current Listing of Claims

I claim:

1. (Currently Amended) An apparatus comprising:

a mold having at least one side wall defining an interior portion ~~and an injector port whereby an extrudable material may be injected, said mold having an opening for injecting material into said interior portion; and~~

~~a member whereby said member is in sealable connection about with said interior portion; said member capable of moving along said interior portion of said mold whereby said member may for adjustably controlling a the density of said extrudable the material.~~

2. (Canceled)

3. (Currently Amended) The apparatus of Claim 18 1, wherein said controlling member comprises a backpressure piston.

4. (Currently Amended) The apparatus of Claim 18 1, wherein said member that ~~adjustably controls a the density further~~ comprises a piston ~~capable of sliding at variable speed along said interior portion for controlling the density of the material.~~

5. (Currently Amended) The apparatus of Claim 20 4, wherein said member further comprises ~~a combination of~~ at least one gear and ~~or~~ at least one brake, ~~wherein said combination engages said piston for adjustably controlling the density of the material.~~

6. (Currently Amended) The apparatus of Claim 20 4, further comprising a ~~mech~~ valve ~~means to shutoff the flow of positioned upstream from said mold, said material valve means further actuating to allow flow when said mold is empty or block flow when said mold is full.~~

7. (Canceled).

8. (Currently Amended) The apparatus of Claim 181, further having said mold with at least one end ~~confining said interior portion,~~ wherein said end ~~mold~~ further comprises a rod

~~on or about said at least one end, slidingly connected therefrom.~~

9. (Currently Amended) The apparatus of Claim 24 8, wherein said end and rod are ~~is~~ pushed outwardly as the mold fills, ~~and the whereby the outward end position of said rod is detected by the a sensor when as~~ said mold is filled ~~or substantially filled, said sensor further actuating said valve means.~~

10. (Currently Amended) The apparatus of Claim 18-1, further comprising a means to shut off the flow of ~~said the~~ injected material when said mold is filled or substantially filled and a means to divert ~~said the~~ material to another mold that is not filled.

11. (Currently Amended) The apparatus of Claim 2610, wherein said means comprises a diverter valve means.

12. (Currently Amended) The apparatus of Claim 2711, wherein said means further comprises a first diverter station and a second diverter station.

13-14 (Canceled)

15 (Currently Amended) The apparatus of Claim 12 1, further comprising:

a means to shut off the flow of ~~said the~~ injected material when said mold is filled or substantially filled.

16 (Canceled)

17. (Currently Amended) An apparatus for making a ~~molded member in a mold~~ comprising:

~~a Banbury mixer or other open a chamber mixer for mixing the materials;~~

~~at least one mold that has sides and ends that can be closed;~~

~~an extruder for filling said the mold with said the mixed materials;~~

~~a member that for adjustably controls controlling a the density of said the materials as the mold is filled;~~

~~a valve to shut off the flow of said mixed materials when said mold is filled;~~

~~a tail stop and/or sensor to indicate when said valve should shut, and~~
~~a water bath for cooling said mold or molds.~~
a valve means capable of allowing flow when the mold is empty and blocking flow when the mold is full; and
an indicator means for sensing material in the mold thereby actuating said valve means.

18. (Currently Amended) The apparatus of Claim 5517, further comprising: wherein, the members are molded in a plurality of molds.

19. (Currently Amended) The apparatus of Claim 55 17, further comprising ~~a means to shut off the flow of said injected material when at least one mold is~~ said valve means to block the flow of the material to the mold that is filled or substantially filled and ~~a means to divert said material to divert the flow to a mold that is not filled~~.

20. (Currently Amended) The apparatus of Claim 55 19, wherein said means comprises a diverter valve.

21. (Currently Amended) The apparatus of Claim 58-19, wherein said means further comprises a first diverter station and a second diverter station.

22. (Currently Amended) The apparatus of Claim 55 17, wherein said the mold further comprises at least one end confining the materials and a sliding rod which extends extending outward from said one end of said the mold, and is said sliding rod moving pushed outwardly as said the mold is filled.

23. (Currently Amended) The apparatus of Claim 60 22, wherein said rod, in its outward end position, is detected by a sensor when said the mold is full or substantially full.

24. (Currently Amended) The apparatus of Claim 64 23, wherein said sensor actuates said valve means causes the mold to close closing the mold that is filled or substantially filled and diverting the material to another mold that is not filled.

25. (Canceled)
26. (Currently Amended) The apparatus of Claim 60 17, having means to push said rod inwardly and push the member out of the mold after said member is formed.
27. (Currently Amended) The apparatus of Claim 66 26, further comprising a cooling rack.
28. (Currently Amended) The apparatus of Claim 65 17, further comprising a texturing member.
29. (Currently Amended) The apparatus of Claim 55 17, wherein said controlling member that adjustably controls the density comprises at least one piston, one gear and ~~at least~~ one brake.
30. (New) The apparatus of Claim 17, further comprising a cooling bath for cooling the mold or molds.
31. (New) The apparatus of Claim 17, further having means to put the mold into the cooling bath and means to take the mold out of the cooling bath.